### INDIANA INCOME and NATIONAL PROJECTIONS 3<sup>rd</sup> Quarter 2006 through 2<sup>nd</sup> Quarter 2009

Prepared by ECONOMIC FORECAST COMMITTEE

**DECEMBER 14, 2006** 

# GDP, U.S. PERSONAL INCOME, and INDIANA NON-FARM PERSONAL INCOME PROJECTIONS

3<sup>rd</sup> Quarter 2006 through 2<sup>nd</sup> Quarter 2009

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#### PREVIOUS FORECAST EVALUATION

In our December 2005 forecast we predicted that U.S. economic growth would continue at roughly the rate of the previous year, while inflation would decelerate during 2006. In fact, output growth fell off significantly after a strong first quarter, and inflation has been whipsawed by the rise and then decline in energy prices. The net result for the past four quarters (through the third quarter) is output growth one-half percent below our expectation and inflation 0.2 percent above our forecast. This yields Nominal GDP growth that was a modest 0.3% points lower than our forecast.

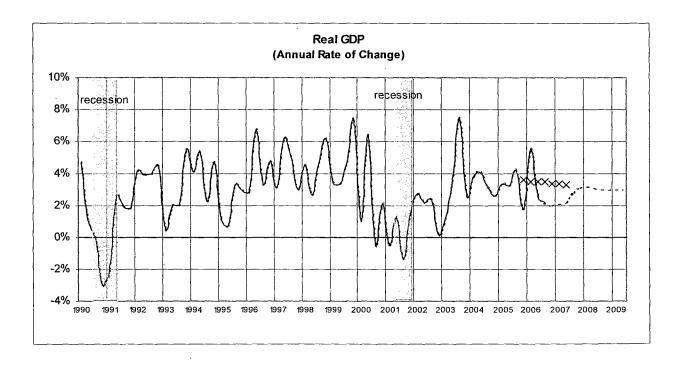
This slightly too optimistic forecast carried over to U.S. Personal Income growth, which came in at 6.7 percent, 0.2% below our estimate. This error did not, however, carry over to the state level. There, based on data through the second quarter, actual growth substantially exceeded our forecast. Most of the discrepancy is due to extremely strong growth in the second quarter. Growth in Indiana income for that quarter was at an annual rate of 6.8%, more than double the national rate of 3.2%. This is an anomaly – over the previous two years average growth in personal income at the national level exceeded growth at the state level by slightly over 1%.

PREVIOUS FORECAST ERRORS (at annual rates)  Four quarters ending 3 <sup>rd</sup> Quarter 2006			
	Forecast	<u>Actual</u>	<u>Error</u>
Real Gross Domestic Product	3.5%	3.0%	+0.5%
GDP Deflator	2.7%	2.9%	-0.2%
Nominal Gross Domestic Product	6.3%	6.0%	+0.3%
U.S. Total Personal Income	6.9%	6.7%	+0.2%
IN Non-Farm Personal Income	5.5%	6.1%	-0.6%

(4 quarters ending 2<sup>nd</sup> Qtr.)

#### REAL GROSS DOMESTIC PRODUCT

As shown in the chart below our forecast for output growth is close to the sluggish third quarter rate through mid-2007, and then rises to a level of about 3 percent. This is a weaker outlook than in our forecast a year ago [x's are previous forecast]. The primary reason for the difference is the behavior and prospects for the housing sector. A year ago, we anticipated that growth in housing would *stall*. Instead, growth has turned decidedly *negative*. In the third quarter the decrease in residential investment lowered the overall output growth rate by more than a full percent.



Our forecast represents an uneasy balance of opposing elements. On the positive side, we expect that the recent moderation of high energy prices will continue. Together with a reasonably healthy labor market, this will provide support for household real income (that is, income adjusted for inflation). We also expect that exports and business investment will provide some boost to economic activity. On the negative side, we expect the housing slowdown to

continue through most of 2007 (although the rate of decline will moderate). More important there will be significant pressures on the household sector, which will limit growth in consumer spending. We do not, however, expect that consumer spending will collapse. This is key to the outlook over the next year.

To date real consumer spending has held up quite well. In the third quarter, at an annual rate, it rose 2.9%, with spending on durable goods rising 6.0%. But there are heavy pressures on household budgets. Much of this pressure is related to housing. Until recently, households have been able to support spending in excess of income (implying a negative personal saving rate) in part through the use of cash-out refinancing of home mortgages, which reached an estimated record \$698 billion in 2005. With somewhat higher mortgage rates since the last refinancing surge, and particularly with housing prices no longer rising (and in some areas beginning to fall) this option is rapidly closing. Through September of this year, cash-outs are down 28% from a year ago. In addition, during the later stages of the housing boom, a growing proportion of home purchases made use of creative financing methods (adjustable rate loans, some with interest only payments or even negative amortization, little or no down payment, etc.). The rise in short-term rates (discussed below) is causing the payments on adjustable rate loans to be reset at higher levels, in some cases substantially higher. This, along with minimal house price appreciation, is causing a significant increase in foreclosures, especially among sub-par borrowers. We expect that this pressure will continue through the next year. But we do not expect it to reach a level that would sink overall consumer spending. Instead, it will serve to limit the possibility of any sort of consumption led boom.

A second pressure on household budgets has been energy prices. The high levels during the summer (which we did not foresee) caused consumers to cut back spending on other items to some extent. Spending on durable goods, for example, was flat in the second quarter. Since we import a high proportion of energy goods, the result was to shift spending away from domestically produced goods. To some extent the reverse effect was at work in the third quarter. There are, however, some residual effects. For one thing, energy prices remain high relative to their levels earlier in this decade. In addition, the very high gasoline prices during the summer seem to have ended (for now, at least) the American love affair with traditional SUVs and other large vehicles. Auto and light truck sales have been sluggish recently, and we anticipate this situation will continue.

A third troubling element in the household budget situation is the negative status of household saving mentioned earlier. The personal saving rate, as measured in the National Income and Product Accounts, has been negative since the second quarter of 2005. To some extent this is explicable first due to the boom in housing values (now clearly ended) and more recently due to the rising stock market. But from a long-term perspective, it cannot continue indefinitely.

Each of these items is reason for concern about the ability of household spending, which represents two-thirds of total spending, to continue as at least a neutral factor in the economic outlook. Offsetting their downward pull is the current situation in the labor market. At the national level, this has been a clear positive, both in terms of employment and in terms of income growth. Looking backwards at horizons from three months to two years, the economy has been generating jobs at a rate a little in excess of 150 thousand per month. This has been sufficient to pull the unemployment rate steadily lower – to 4.5% currently, from 5.5% two years ago. As the labor market has tightened, especially recently, wages have started to rise, even with adjustment for inflation. Rising income and good job prospects are solid barriers against a collapse in household spending.

Looking beyond consumption, we expect that the international sector will be a positive factor. For one thing, economies of nearly all of our trading partners are doing reasonably well. The very rapid growth in China and India is ongoing. Both Japan and continental Europe are doing better than in the recent past. Moreover, unlike past episodes of improvement in Japan and Europe that were driven primarily by demand for their exports, recent growth is being fueled more by domestic demand from consumers and business. This implies positive prospects for U.S. exporters. In addition, the dollar has been depreciating in recent months, increasing the competitiveness of U.S. goods and services on the international market.

Business spending on new plant and equipment seems to have weakened somewhat in the fourth quarter, but we expect this to be temporary. Given upward pressure on labor costs, we feel that business will need to invest in order to improve productivity. There may be areas of weakness, however. One of these could be spending on heavy-duty trucks, which has been very strong this year. At the beginning of 2007 a new set of environmental regulations for heavy truck engines takes effect. It is likely that some of the current spending is in anticipation of these rules.

Two underlying factors that affect our forecast warrant discussion: the outlook for monetary policy and for oil prices. Regarding the former, the Federal Reserve began raising its target for the federal funds rate starting in mid-2004. Over the next two years it raised that target a total of 17 times, reaching 5.25% in June of this year. It has since maintained that level. Although the recent decline in energy prices has improved recent overall inflation, the core inflation rate (excluding food and energy) remains well above the Fed's presumed comfort level. We think this will keep the Fed from lowering rates until late 2007, at the earliest. On the other hand, we think further tightening is also unlikely. The significant tightening over the past 30 months has had remarkably little effect on longer-term rates. Indeed, recently these rates have been coming down. We think this is unlikely to continue in the economic environment we envision.

Crude oil prices have been very volatile for a considerable period. During the spring and summer they rose above \$70 per barrel. Then in early fall, when it began to appear that the hurricane season would pass without serious incident, the price fell well below \$60, and more recently back up to a little over \$60. We expect the price to average between \$60 and \$65 over the next two years, although probably with some periods above and below that range.

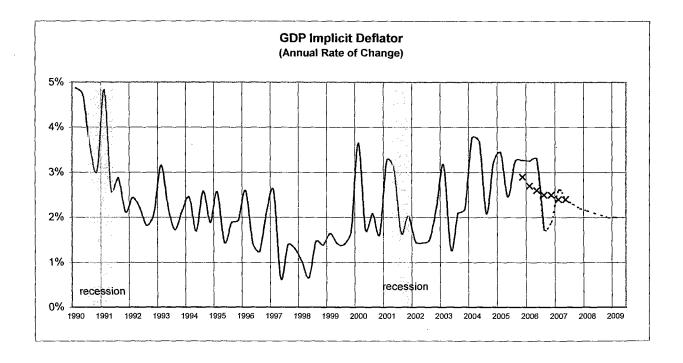
Although our forecast, particularly near-term, is not particularly upbeat, the risks seem mostly to the downside. A central danger is how the housing sector decline plays out. If housing construction and particularly housing prices decline more than we expect, the damage to household budgets could significantly impact on household spending in general. A return to much higher energy prices could carry the same risk. In either case, there would be a definite risk of recession.

Overall, we expect that the national economy will muddle through the next year, with rising exports and business investment spending offsetting continuing contraction in housing. Consumption will be weak, especially on autos and other durable goods, but will not collapse. Later next year and beyond the economy will regain some momentum as the drag from the housing sector diminishes. The table on the next page shows the forecast for the current and following two fiscal years.

	Real GD Current and Previo (2 <sup>nd</sup> Quarter to 2 <sup>nd</sup>	ous Forecast	
	Current <u>12/14/06</u>	Previous <u>12/14/05</u>	% Point <u>Difference</u>
FY 2006-07	2.1%	3.4%	-1.3%
FY 2007-08	3.0%		
FY 2008-09	3.0%		ļ

#### GDP IMPLICIT DEFLATOR

As can be seen in the chart below, after an extended period in which inflation averaged at or below 2%, the overall inflation rate has moved up close to 3% during the past two years. There is, however, considerable quarter-to-quarter volatility due in large part to fluctuations in energy prices. While this volatility in energy prices is likely to continue, we expect the broad trend over the next two and a half years will be downward primarily as a lagged response to the recent more restrictive monetary policy. The Federal Reserve has not only raised interest rates 17 times so far, but has strongly indicated a willingness to raise rates further if inflation does not settle back into their desired range. In the immediate future, we think that inflation in the fourth quarter will be held down by lower energy and housing prices, essentially a repeat of the third quarter experience. But then we expect a rebound back above 2.5%, followed by a gradual decline to about 2% by late 2008.



As with output, there are a number of crosscurrents in the inflation outlook. Energy prices are obviously one, and we foresee some improvement there compared with the past year. The same is true for housing prices. Another positive factor is the slowdown in economic

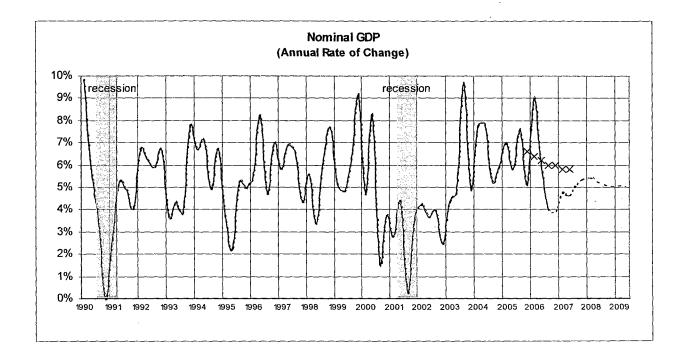
growth we see for the next year (every cloud has a silver lining), which could alleviate some pressure on industrial capacity. On the other side of the ledger, the tight labor market is causing labor costs to rise, and depreciation of the dollar (which we expect to continue) will put upward pressure on import prices. Rising import prices could enhance the ability of domestic firms to pass on increases in their costs. In addition, the strength we see in the world economy will continue to put pressure on commodity prices.

The table below shows our forecast for the GDP deflator for the current and next two fiscal years.

	GDP Implicit Pric Current and Previo (2 <sup>nd</sup> Quarter to 2 <sup>nd</sup>	ous Forecast	
	Current <u>12/14/06</u>	Previous <u>12/14/05</u>	% Point <u>Difference</u>
FY 2006-07	2.2%	2.4%	-0.2%
FY 2007-08	2.2%		
FY 2008-09	2.0%	·	

### NOMINAL GROSS DOMESTIC PRODUCT

Combining our sluggish forecast for the real economy with our moderating path for inflation, results in a weak picture for nominal GDP during the next year, with somewhat higher numbers after mid-2007.



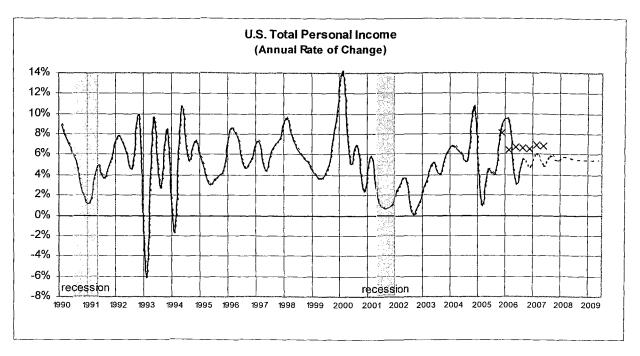
	Nominal G Current and Previo (2 <sup>nd</sup> Quarter to 2 <sup>nd</sup>	ous Forecast	
	Current 12/14/06	Previous 12/14/05	% Point <u>Difference</u>
FY 2006-07	4.3%	5.9%	-1.6%
FY 2007-08	5.3%		
FY 2008-09	5.1%		

#### U.S. TOTAL PERSONAL INCOME

After lagging for the first three years of the current expansion, personal income growth has been averaging close to growth in nominal GDP during the past two years. We expect further movement in this direction in the period ahead.

The relatively slow income growth over the past five years has been associated with a dramatic shift in the shares of total national income of capital and labor, with the latter falling and the share of profits rising to levels not seen since the 1960s. We think that a tight labor market will reverse this trend over the next three years. Rising real wages will increase labor income and also put pressure on business profits. The ratio of personal income to nominal GDP will consequently rise. This is similar to the pattern during the second half of the long expansion during the 1990s. Our forecast for the first quarter of 2007 includes a little above trend growth in income to account for the abnormally large bonuses that we expect will be forthcoming in the financial sector. Other than that, we think personal income should move generally in tandem with nominal GDP, except on a slightly faster growth path.

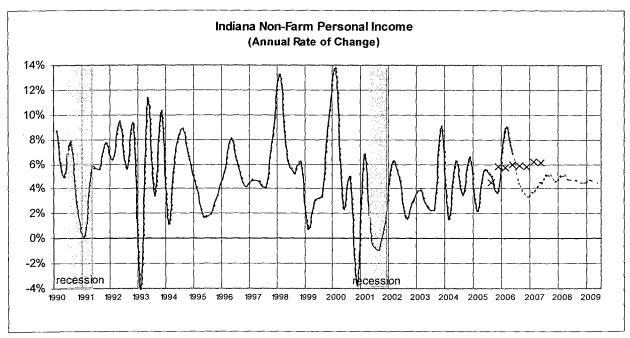
This result is income growth in the mid five percent range as can be seen in the chart and table.



	U.S. Total Person Current and Previo (2 <sup>nd</sup> Quarter to 2 <sup>nd</sup>	ous Forecast	
	Current <u>12/14/06</u>	Previous <u>12/14/05</u>	% Point <u>Difference</u>
FY 2006-07	5.3%	6.7%	-1.4%
FY 2007-08	5.7%		
FY 2008-09	5.4%		

#### INDIANA NON-FARM PERSONAL INCOME

For over half a century Indiana personal income has lost ground relative to the nation, a trend that continues in recent data. On average, since a brief surge early in the current expansion, Indiana non-farm personal income followed a growth pattern similar to U.S. personal income, but with a growth rate about one percent lower. We expect this trend to continue over the forecast period. There are a number of underlying causes. To begin with, population growth in Indiana is below that for the U.S. as a whole, and to some extent this carries over to employment. But even more important, the sectors of the Indiana economy with the highest average incomes (in particular, manufacturing) are those in which employment growth is lowest,



while areas in which employment in the state is rising are predominantly sectors with below average income levels. Since its low point in early 2002, for example, Indiana non-farm employment has grown by almost 100 thousand. This represents total growth of 3.4%, which falls short of national growth of 4.3%. However, over the same period, the state's manufacturing sector has lost over 18 thousand jobs. In relative terms this is significantly *better* than manufacturing at the national level, but it still implies downward pressure on the growth of state income. On the other hand, high-income sectors that are a source of significant income growth

at the national level are areas where there is less employment growth in Indiana. Examples would include finance and business and professional services.

Looking to the future, we expect to see growth in Indiana income that continues below that for the nation. As can be seen in the above chart, this situation results in income growth over the period ahead that is generally in line with the past several years. From the beginning of 2002 through the second quarter of this year Indiana non-farm personal income growth averaged 4.6%. For the two and one-half years beginning with this year's third quarter our forecast is for average income growth of 4.5%. Quarterly growth starts below this average due to a sluggish economy, and then rises somewhat after mid-2007.

	Indiana Non-Farm Pe Current and Previo (Quarterly Data An Fiscal Years are 2 <sup>nd</sup> Quart	ous Forecast	
	Current 12/14/06	Previous 12/14/05	% Point Difference
2006:3	4.2%	5.9%	-1.7%
2006:4	3.4%	5.8%	-2.4%
2007:1	3.8%	6.2%	-2.4%
2007:2	4.5%	6.1%	-1.6%
2007:3	5.1%		
2007:4	4.6%		
2008:1	5.1%		
2008:2	4.7%		
2008:3	4.8%		
2008:4	4.5%		
2009:1	4.7%		
2009:2	4.6%		
FY 2006-07	4.0%	6.0%	-2.0%
FY 2007-08	4.9%	0.070	2.070
FY 2008-09	4.7%		

## GROSS DOMESTIC PRODUCT PROJECTIONS

December 14, 2006

		<b>Gross Domestic Product</b>		<b>GDP</b> Implicit	<b>Quarterly Percent Changes</b>		
		Billie	ons of \$	Price Deflator	At Annual Rates		ites
		Real	Nominal	1996=100	Real	Deflator	Nominal
Actual:	,					- <del></del>	
2002	0.1	0.077.2	10.222.2	102 5681	0.7	1.5	4.0
2002	QI	9,977.3	10,333.3	103.5681	2.7	1.5	4.3
	Q2	10,031.6	10,426.6	103.9376	2.2	1.4	3.7
	Q3	10,090.7	10,527.4	104.3277	2.4	1.5	3.9
	Q4	10,095.8	10,591.1	104.9060	0.2	2.2	2.4
2003	Q1	10,126.0	10,705.6	105.7239	1.2	3.2	4.4
	$\widetilde{Q2}$	10,212.7	10,831.8	106.0621	3.5	1.3	4.8
	Q3	10,398.7	11,086.1	106.6104	7.5	2.1	9.7
	Q4	10,467.0	11,219.5	107.1893	2.7	2.2	4.9
2004	01	10 566 2	11.420.0	100 1026	3.8	2.0	7.0
2004	Q1	10,566.3	11,430.9	108.1826		3.8	7.8
	Q2	10,671.5	11,649.3	109.1627	4.0	3.7	7.9
	Q3	10,753.3	11,799.4	109.7282	3.1	2.1	5.3
	Q4	10,822.9	11,970.3	110.6016	2.6	3.2	5.9
2005	Q1	10,913.8	12,173.2	111.5395	3.4	3.4	7.0
	Q2	11,001.8	12,346.1	112.2189	3.3	2.5	5.8
	Q3	11,115.1	12,573.5	113.1209	4.2	3.3	7.6
	Q4	11,163.8	12,730.5	114.0338	1.8	3.3	5.1
	QŦ	11,105.0	12,750.5	114.0330	1.0	5.5	5.1
2006	Q1	11,316.4	13,008.4	114.9518	5.6	3.3	9.0
	Q2	11,388.1	13,197.3	115.8868	2.6	3.3	5.9
	Q3	11,450.5	13,327.1	116.3888	2.2	1.7	4.0
Projection	ıs:						
	Q4	11,507.3	13,456.6	116.94	2.0	1.9	3.9
	٤.	11,507.5	13,430.0	110.54	2.0	1.2	3.9
2007	QI	11,567.2	13,613.4	117.69	2.1	2.6	4.7
	$\overline{Q}2$	11,630.3	13,769.1	118.39	2.2	2.4	4.7
	Q3	11,710.9	13,943.0	119.06	2.8	2.3	5.1
	$\widetilde{Q}$ 4	11,800.6	14,126.5	119.71	3.1	2.2	5.4
2000	01			100.05	2.2	2.2	5.1
2008	QI	11,893.9	14,314.3	120.35	3.2	2.2	5.4
	Q2	11,985.0	14,499.5	120.98	3.1	2.1	5.3
	Q3	12,073.9	14,681.9	121.60	3.0	2.1	5.1
	. Q4	12,163.5	14,863.8	122.20	3.0	2.0	5.0
2009	01	12,253.7	15,048.8	122.81	3.0	2.0	5.1
	Q1 Q2	12,344.6	15,235.7	123.42	3.0	2.0	5.1
			Indiana Fiscal Years (Ending June 30th)	3		Percent Chan (Q2-Q2)	
			2003	<del></del>	1.8	$\frac{(Q^{2}-Q^{2})}{2.0}$	3.9
			2003				
			2004		4.5 3.1	2.9 2.8	7.5 6.0
			2006		3.5	3.3	6.9
			2007		2.1	2.2	4.3
			2008		3.0	2.2	5.3
			2009		3.0	2.0	5.1

## PERSONAL INCOME PROJECTIONS December 14, 2006

		U.S. Total	. Total Indiana Nonfarm		Quarterly Percent Change At Annual Rates	
		Billions of \$	Millions of \$	U.S.	Indiana	
Actual:						
2002	Q1	8,814.7	170,147	2.8	6.2	
2002	Q2	8,892.0	172,210	3.6	4.9	
	$\widetilde{Q3}$	8,895.4	172,903	0.2	1.6	
	Q4	8,925.5	174,229	1.4	3.1	
2003	Q1	8,998.2	175,886	3.3	3.9	
	Q2	9,111.3	176,989	5.1	2.5	
	Q3	9,203.6	178,006	4.1	2.3	
	Q4	9,341.3	181,909	6.1	9.1	
2004	QI	9,497.7	182,623	6.9	1.6	
	Q2	9,640.5	185,444	6.2	6.3	
	Q3	9,767.9	187,048	5.4	3.5	
	Q4	10,019.4	190,014	10.7	6.5	
2005	Q1	10,048.8	191,049	1.2	2.2	
	Q2	10,161.5	193,615	4.6	5.5	
	Q3	10,262.7	195,998	4.0	5.0	
	Q4	10,483.7	197,816	8.9	3.8	
2006	Q1	10,721.4	202,104	9.4	9.0	
	Q2	10,807.3	205,461	3.2	6.8	
	Q3	10,954.0	207,578	5.5	4.2	
rojectio	ns:					
	Q4	11,081.5	209,330	4.7	3.4	
2007	QI	11,244.7	211,288	6.0	3.8	
	$\widetilde{Q}$ 2	11,380.2	213,606	4.9	4.5	
	$\widetilde{Q}^{-}_{3}$	11,542.0	216,297	5.8	5.1	
	Q4	11,696.7	218,728	5.5	4.6	
2008	Q1	11,862.3	221,469	5.8	5.1	
2000	$\tilde{Q}^2$	12,025.9	224,043	5.6	4.7	
	Q3	12,186.0	226,660	5.4	4.8	
	$Q_4$	12,348.8	229,194	5.5	4.5	
2009	QI	12,513.1	231,868	5.4	4.7	
	$\widetilde{Q}2$	12,680.7	234,466	5.5	4.6	
			Indiana Fiscal Years	Percer	t Changes	
			(Ending June 30th)	((	(2-Q2)	
			2003	2.5	2.8	
			2004	5.8	4.8	
			2005	5.4	4.4	
			2006	6.4	6.1	
			2007	5.3	4.0	
			2008	5.7	4.9	
			2009	5.4	4.7	